

Project Report – FY2006

Core Name: Outreach and Education

Project Title: Education and Outreach

Reporting Period: 1 October 2005 to 30 September 2006

Principal Investigator(s): Susan Lovelace, Hollings Marine Laboratory

Associate Investigator(s): Susan Lovelace, David White, Courtney Burge, and Anne Blair, Hollings Marine Laboratory

Background and Rationale:

The Outreach and Education program of the NOAA Center of Excellence for Oceans and Human Health (OHH) at the Hollings Marine Laboratory (HML) is a cross-cutting program that is designed to be a transparent part of research, data management, synthesis, and program management activities and includes all research programs. All of the Principal Investigators working on the projects associated with the NOAA Center of Excellence at the HML are required to participate in education and outreach activities. The HML Outreach Coordinator is responsible for coordinating and organizing the transfer of technology and knowledge produced by the OHH Center at the HML to diverse audiences. The target audiences for outreach include public health agencies, regulatory and resource management agencies, other scientists and university students. The Outreach Coordinator is also responsible for developing the education programs what will ensure the knowledge produced by NOAA's Oceans and Human Health Initiative is transferred to the next generation and the public.

Outreach and education are dynamic activities that take advantage of opportunities to connect science and society. Therefore, the outreach and education objectives for the OHH Center at the HML should not be static but continually refined based on research outcomes, increased understanding of linkages between oceans and human health and greater understanding of where this information can be an important contribution to society. While the research program is developing new information and products it is important for the outreach program to develop networks and conduits for future education activities. As tools and information become available the outreach coordinator will assist researchers in engaging the many scientific, development, and users groups that might benefit from the products

Objectives:

- The Outreach and Education Coordinator will collaborate with the research project investigators and core leads to ensure that appropriate local and national linkages are established to move their research results to appropriate intermediate and end users of their technology, tools, and information in a timely manner.
- Under the OHH legislation, the NOAA OHHI information should be presented to the public so that they can make informed choices relative to ecosystem and personal

health. The Outreach and Education Coordinator will coordinate and cooperate with the NOAA OHH Centers at the Great Lakes Environmental Research Laboratory in Ann Arbor MI and the Northwest Fisheries Science Center in Seattle WA and, where possible, coordinate with the National Institute of Environmental Health Sciences/National Science Foundation (NIEHS/NSF) OHH Centers to develop and implement education and outreach services to reach a broad audience.

Accomplishments:

- The HML Outreach Coordinator conducted planning activities with the other NOAA OHH Centers that included:
 - Suggest content for the Interagency Working Group report to congress relative to education and outreach activities in OHH programs.
 - Produced a Teacher Professional Development Proposal that includes initial planning and materials for:
 - NOAA NOS Discovery Kit
 - NOAA National Science Teachers Association (NSTA) OHH Sci-Pack
 - NOAA National Marine Education Association Journal “Currents” Issue
 - Collaboration with other NOAA OHH Centers to produce an unfunded NOAA Environmental Education grant proposal “Fostering Ocean Literacy Among Urban Youth: A Regional Case Study Approach to Oceans and Human Health Issues”
 - Produced written summaries and presentations about the program for diverse audiences.
- The HML Outreach Coordinator partnered with the NSF funded ARMADA program at the University of Rhode Island’s Office of Marine Programs to support one teacher research experience at HML (Summer 2006). This fourth grade teacher produced materials that HML can share with other teachers and students as well as her own. The HML scientists will continue to collaborate with the Armada teacher through classroom visits and tidal marsh field trips.
- In cooperation with the Data Management Core and HML staff developed the Southeastern Watersheds Metadata website (SWM), <http://hml.noaa.gov/ohh/data/map/swmm.html>, where a wide variety of audiences can access information about research in tidal creeks, and scientists can access metadata and data sources. .
- To introduce a new audience to Oceans and Human Health research HML produced an exhibit for Piccolo Spoleto, an art festival in Charleston entitled, The Art in Science. This exhibit drew the public in to ask questions about the research that produced the art.

- Prepared weekly report items about HML OHH projects for submittal through NOS reporting channels.
- Coordinated and provided administrative supervision of Hollings Scholar Intern.
- Initiated collaboration with the South Carolina Aquarium to plan a 4 part seminar/panel and questions and answers series that is scheduled to take place throughout 2007, beginning in Jan. The series will celebrate NOAA's 200th Anniversary.
- Conducted communications needs assessment of scientific, technical and student OHH researchers to develop a communications plan for internal audiences and to begin a plan for external audiences.

Publications/Presentations:

Publications

- Bauer, M. , ed. *Harmful Algal Research and Response: A Human Dimensions Strategy*, 2006 National Office for Marine Biotoxins and Harmful Algal Blooms, contributor.

Presentations

- January 2006 NOAA OHHI Meeting
- April 2006 OHH Program Meeting
- July 2006 Presentation: National Marine Educators Association Conference (HML research in Monitoring, Assessment and Prediction in Tidal Creeks and ARMADA teachers in the Classroom)
- July 2006 Poster: National Marine Educators Association Conference, NOAA's Centers of Excellence in Oceans and Human Health

Application/Technology Transfer relevant to OHH Strategic Goals

1.0 Scientific Research and Application

Ultimately, the outreach program will provide information and feedback from the end-users of OHH research to the OHH program to inform and affect the research process. Current efforts are to ensure communication between diverse research groups through seminars and scientific meeting presentations.

2.0 Public Information and Outreach

- Suggest content for the Interagency Working Group report to congress relative to education and outreach activities in OHH programs.
- Produced a Teacher Professional Development Proposal for OHH COEs
- Collaboration with other NOAA OHH Centers to produce proposal "Fostering Ocean Literacy Among Urban Youth: A Regional Case Study Approach to Oceans and Human Health Issues"

- Produced written summaries and presentations about the program for diverse audiences.
- Partnered with the ARMADA program to support one teacher research experience at HML (Summer 2006).
- developed the Southeastern Watersheds Metadata website (SWM), <http://hml.noaa.gov/ohh/data/map/swmm.html>,
- Produced an exhibit for Piccolo Spoleto, an art festival in Charleston entitled, The Art in Science.
- Continued to develop and update one-pagers with basic information about the OHH program and its component core areas and research projects at HML.
- Coordinated an internal seminar series to allow scientists to share information and discuss projects.
- Prepared weekly report items about HML OHH projects for submittal through NOS reporting channels.
- Coordinated and provided administrative supervision of Hollings Scholar Intern.
- Initiated collaboration with the South Carolina Aquarium to plan a 4 part seminar/panel and questions and answers series that is scheduled to take place throughout 2007, beginning in Jan. The series will celebrate NOAA's 200th Anniversary.
- Worked with researchers to carry out specific outreach activities.

3.0 Capacity Building

The outreach program is developing the connections between oceans and human health researchers and their constituents and developing methods and tools to enable the transfer of information, skills and technology. The Outreach program serves to identify opportunities for extension of research to appropriate audiences as well as being a willing partner to ensure completion of activities.

- Conducted communications needs assessment of scientific, technical and student OHH researchers to develop a communications plan.

Project Abstract:

The Outreach and Education program of the NOAA Center of Excellence for Oceans and Human Health (OHH) at the Hollings Marine Laboratory (HML) is a cross-cutting program that is designed to be a transparent part of research, data management, synthesis, and program management activities and includes all research programs. The goal of the Education and Outreach Program is to transfer the technology and knowledge produced by the OHH Center at the HML to diverse audiences. The target audiences for outreach include public health agencies, regulatory and resource management agencies, other scientists, and university students. The Outreach Coordinator is also responsible for

developing the education programs what will ensure the knowledge produced by NOAA's Oceans and Human Health Initiative is transferred to the next generation through teachers and students and public audiences.

Highlights include outreach and education cooperative activities conducted with the Centers of Excellence at the Northwest Fisheries Science Center and the Great Lakes Environmental Research Laboratory as well as the NOAA OHHI program. In addition, the Outreach Coordinator collaborated in grant proposals to enhance the capacity of the Center of Excellence to provide training to students, developed and published web-based and hard copy materials about the research program, and completed planning with the South Carolina Aquarium to provide seminars and panel discussions for the public and targeted audiences. The Outreach Coordinator traveled to OHH related professional meetings to present overviews of the Center and OHH programs.

Unresolved Issues:

- The outreach and education position is becoming established and evolving. Since this is a new area for many researchers to consider, it will take time to establish means of communicating and funding associated with outreach and education projects.

Budget Report:

HML

	Year 1	Year 2	Year 3	Encumbered (10/1/06- 3/31/06)
Personnel Salaries (contract)		\$63,000 (est.)	\$84,111.00	\$48,374.40
Armada support (through OE)			\$10,000.00	
Total Expended for Years 2 and 3 O&E Activities			\$157,111.00	
Total Encumbered for Year 3			\$48,374.40	